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09/360,399	07/23/1999	PERRY A. CARO	07844/303001	4121

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EXAMINER

HUYNH, CONG LAC T

ART UNIT	PAPER NUMBER
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2178

DATE MAILED: 06/09/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

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**Office Action Summary**

Application No.

09/360,399

Applicant(s)

CARO ET AL.

Examiner

Cong-Lac Huynh

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM  
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 July 1999.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-54 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-54 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2,3
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

### **DETAILED ACTION**

1. This action is responsive to communications: the application filed on 7/23/99, and the IDSs filed on 7/12/02 and 8/5/02.
2. Claims 1-54 are pending in the case. Claims 1, 3, 12, 19-21, 27, 34, 40, 45, 50, 51, 53-54 are independent claims.

#### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 10-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 10, it is unclear why "the bindings for the two documents are the same but at least one of the content elements and layout elements associated with the binding sites is different for the document and the different document." If the bindings of the two documents are the same, then the content elements and the layout elements should be the same since each element has a unique name as mentioned in claim 7. Please explain and give an example.

Regarding claim 11, the claim is rejected under the opposite issue as mentioned in claim 10. It is unclear why "the bindings for the two documents are different but at least some of the content elements and layout elements associated with the binding sites are

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the same for the document and the different document.” If the bindings of the two documents are different, then the content elements and the layout elements should be different since the association of content and layout of the two documents are different. Please explain and give an example.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 1-54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ferrel et al. (US Pat No. 6,199,082 B1, 3/6/01, filed 7/17/95).

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Regarding independent claim 1, Ferrel discloses:

- enabling storage of bindings that describe a document by associating content elements with layout elements (figure 1, #146, #148, #150, #152, #154, #156: the associations of title layout and content; col 8, lines 15-64: "the system keeps track of *links between a piece of content and its associated page layout*.. content objects are viewed after being formatted by a particular linked *control*. The *control* knows how to format a particular piece of content by looking at the style that has been defined for that ... ability of each control on a page ...")
- the layout elements defining layout features or placement information to be applied to the associated content elements in the document (col 10, lines 3-29)

Ferrel does not disclose explicitly that the bindings are stored separately from both content and layout elements.

Instead Ferrel discloses that the content and design (equivalent to layout) are stored separately (col 1, lines 8-11; col 5, lines 7-41; col 8, lines 15-64).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to have modified Ferrel to include the feature of storing the bindings separately from both content and layout elements for the following reason. The fact that content and layout elements are stored separately and the controls which are instructions for gathering, formatting and displaying the linked content onto the page suggests that the controls including control information for associating content and layout elements for documents be stored separately from both content and layout

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elements since the controls, which are linking information of content and layout, include information independent from the content elements and the layout elements.

Regarding claim 2, which is dependent on claim 1, Ferrel discloses enabling storage of bindings that describe another, different document by associating at least one of the content elements with at least one of the layout elements, at least one layout elements defining layout features or placement information to be applied to at least one corresponding content element in the different document, the bindings for the different document being stored separately from the binding for the document and separately from the content and layout elements (col 8, lines 15-64: "... many *different pieces of contents* can be viewed with the *same appearance*... the concept of *viewing the same content objects in many different ways*... because each control on a page has a different associated style sheet, different controls on the same page can each *display the same linked content in varying formats*"; figure 4: different projects have different controls of associations of content and layout for different documents; the different associations of layout and content elements based on different controls).

Independent claim 3 includes limitations of claims 1 and 2, and is rejected under the same rationale.

Regarding claim 4, which is dependent on claim 1 or 3, Ferrel discloses that the bindings provide a primary control for the generation of the document and the different

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document (col 8, lines 15-64: different projects provide the controls on the content and the layout objects to generate different documents).

Regarding claim 5, which is dependent on claim 2 or 3, Ferrel discloses enabling generation of the document and the different document using the elements and bindings (col 8, lines 15-64: as mentioned in claim 4, different documents are generated based on the different controls of different projects on the content and layout elements).

Regarding claim 6, which is dependent on claim 1 or 3, Ferrel discloses enabling storage of the content elements and the layout elements (col 8, lines 15-19: "content and design are stored as separate objects in the public distribution site so that many different pieces of content can be viewed with the same appearance"; col 11, lines 14-20: "... after creation, the title layout 110, 116, and content 112, 114, 118 are released and stored in a publication storage ..").

Regarding claim 7, which is dependent on claim 1 or 3, Ferrel discloses that at least some of the layout elements and at least some of the content elements are identified by uniquely named binding sites (col 8, lines 15-29: since content and design are stored as separate objects where an object can be defined as a discrete data item stored in persistent storage or in memory, it would have been obvious that each content object or each layout object should have a unique name).

Regarding claim 8, which is dependent on claim 1 or 3, Ferrel discloses that the content elements are stored in a portfolio and the layout elements are stored in a separate portfolio (col 8, lines 15-29: the fact that the content and layout are stored in separate objects suggests formatting a content portfolio based on the content objects and storing the formatted content portfolio and also suggests separately formatting a layout portfolio based on the layout objects and thus storing the layout portfolio separately from the content portfolio).

Regarding claim 9, which is dependent on claim 1 or 3, Ferrel discloses that some of the bindings are layout-centric and some of the bindings are content-centric (col 8, lines 15-29: "the content and the design are stored as separate objects in the public distribution site so that *many different pieces of content can be viewed with the same appearance*"; col 10, lines 37-63: a layout can be used for binding with a content where the content can be updated; col 8, lines 49-64: "one important facet of this invention is the concept of viewing the same content objects in many different ways ...different controls on the same page can each displays the same linked content in varying formats"; col 8, line 65 to col 9, line 7: *a content can be displayed by different styles chosen by the designer to change the style*).

Regarding claim 10, which is dependent on claim 2 or 3, Ferrel discloses that the bindings for the two documents are the same and at least one of the content elements and layout elements associated with the binding sites is different for the document and



the different document (col 8, lines 49-64: "because each control on a page can have a different associated style sheet, different controls on the same page can each display the same linked content in varying format" implies that two same contents if associated with different formats would produce two different documents based on different layouts).

Regarding claim 11, which is dependent on claim 2 or 3, Ferrel discloses that the bindings for the two documents are different and at least some of the content elements and layout elements associated with the binding sites are the same for the document and the different document (col 10, lines 37 to col 11, line 7: a same layout (title) is associated with updated contents would produce two different documents).

Regarding independent claim 12, Ferrel discloses:

- creating content elements for use in documents (figure 1, #112, #114, #118; col 5, lines 29-41: "... the author can *create the content objects*"; col 11, lines 14-20: "returning to the *creation of title layouts and content* by the publisher...")
- storing the content elements in a format native to the application program (col 8, lines 15-20; col 11, lines 14-20, 45-62: "after creation, the title layouts 110, 116 and contents 112, 114, 118 are released and *stored in a publication storage 120*. *The storage 120 can be implemented in many forms, such as a network 122, CD-ROM 124, and other means of storage, such as bulletin boards, magnetic media, cable television and so forth*", "the title layouts and/or content are

*preferably stored in a network 122 that includes a high-performance server for hosting on-line application"; the fact that the contents are stored in the network 122 that includes a high-performance server for hosting on-line application suggests that the format of the contents when storing is native in the on-line application so that the stored contents can be understandable by the application)*

- forming a content portfolio, based on the stored content elements by storing unique binding names associated with respective content elements (figure 4: content folders #292, #296, #298, #304, #308 for storing content elements, title folders #294, #300, #306 for storing layouts; the fact that each project has content folders and title folders that include content and layout for generating different documents suggest that each content element have an unique name for conveniently calling the content elements in associating with the layout elements)

Ferrel also does not explicitly disclose storing information with each of the contents that aids a formatter in generating document based on the content elements and on layout elements stored in a layout portfolio.

However, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to have modified Ferrel to include a formatter for generating document based on the content elements and on layout elements stored in a layout portfolio since Ferrel does teach the controls for generating documents based on the page layouts and the content objects (col 8, lines 30-64; figure 8: different controls for generating the content and the layout of a page).

Regarding claim 13, which is dependent on claim 12, Ferrel discloses that the information that aides the formatter comprises attributes associated with the content elements (col 8, lines 30-48: "... the designer creates projects with design and content *information* ...within each section are pages that define the information that is displayed to a single screen", the information is considered as attributes associated with the content for linking the content and the layout of a document; col 18, lines 31-45: the *information needed to build and distribute one or more title and any associated content* included in the project C suggest the claimed attributes since this information is for building the title and the associated content).

Regarding claim 14, which is dependent on claim 12, Ferrel discloses that storing binding specification which refers to the content elements (figure 1: title A, title B, ...title P are binding specifications which refer to content 148, content 152, content 156).

Regarding claim 15, which is dependent on claim 12, Ferrel discloses that forming of the content portfolio also comprises storing implementation specific properties (col 28, lines 49-57: the project object represents the entire contents of the project and has properties representing where the project's content are released to; col 18, line 53 to col 19, line 17: the Properties option from the menu for editing the content objects implies that the properties of content objects are stored, and the creation of content objects suggest forming a content portfolio based on the created content objects).

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Regarding claim 16, which is dependent on claim 12, Ferrel discloses that forming of the content portfolio also comprises storing portfolio-specific attributes (col 32, lines 37-61: the content folder which is considered as a content portfolio comprises two types of content objects Stories and Pictures with specific attributes).

Regarding claim 17, which is dependent on claim 12, Ferrel discloses that forming of the content portfolio also comprises storing a list of binding sites of elements belonging to the content portfolio (col 32, lines 37-61: the fact that the content folders are containers for titles and for story objects suggest that the container contain a list of the names of these objects).

Regarding claim 18, which is dependent on claim 12, Ferrel discloses that forming of the content portfolio also comprises storing a list of groups of content elements belonging to the content portfolio (col 32, lines 37-61: the fact that the content folder comprises two types of content objects Stories and Pictures suggests that the content folder comprise a list of two groups of content elements belonging to the content portfolio and stored in the memory).

Claims 19-26 are for a medium for storing a machine-readable program of method claims 1-2, 12-13, 16-18, and are rejected under the same rationale.

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Independent claim 27 includes the same limitations as in independent claim 12 but for layout elements instead of content elements. Ferrel discloses that the layouts and contents for generating documents are stored separately where the layouts are stored in title folders (col 10, line 3 to col 11, line 20; figure 4; col 15, line 44 to col 16, line 13). This suggests that Ferrel include the same features of layout elements needed for generating documents as disclosed for content elements.

Claims 28-33 include the same limitations as in claims 13-18 but for layout elements instead of content elements, and are rejected under the same rationale and under the same argument as mentioned in claim 27.

Claims 34-39 are for a medium of method claims 27-33, and are rejected under the same rationale.

Regarding independent 40, Ferrel discloses creating a binding specification for use in formatting documents based on the binding specification, the content elements referenced by the binding specification and the layout elements referenced by the binding specification (figure 1: title A, title B, ... title P include the specific layout and the specific content for formatting different documents for different customers). Ferrel does not does not explicitly disclose storing in the binding specification global bindings and direct bindings that aid the formatter in formatting documents.

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Instead Ferrel discloses that the publisher can place the content, such as *a set of content objects in one or more containers of a title* and then create sections or subsections having pages with special controls, such as a set of title layout objects that dynamically find and display the content at run-time (col 10, lines 31-67). The style sheet object included in the layout has a *globally unique identifier GUID* that can be used to identify an object with a unique string of characters where the control for controlling the link between the layout and the content of a document keeps a record of a GUID associated with its linked style sheet (col 23, lines 48-67).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to have modified Ferrel to incorporate the global bindings and the direct bindings into Ferrel for the following reason. The fact that Ferrel discloses the *globally unique identifier* for identifying the style sheet object included in the layout elements suggests a *global* storing of said identifier. Further, the placement of a content into the layout suggests a direct binding in formatting documents since said placement directly indicates how to link a content to a layout.

Regarding claim 41, which is dependent on claim 40, Ferrel does not disclose explicitly that the global bindings include a list of element bindings that define a default binding for elements of a specified type. However, Ferrel does teach that the style sheet objects are stored in the cache object store COS under the GUID as mentioned in claim 40 (col 23, lines 25-67).

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It would have been obvious to one of ordinary skill in the art at the time of the invention was made to have modified Ferrel to include a list of element bindings that define a default binding for elements of a specified type since storing of style objects by object identifiers suggests a list of default element bindings for a specified type of style sheet.

Regarding claim 42, which is dependent on claim 41, Ferrel discloses that the global bindings include a list of model bindings that define a default model for a specified binding site (figure 4 and col 15, line 44 to col 16, line 13: the container of publishers which contain a plurality of publishers including projects which are predefined binding of title folders and content folders is considered as a list of model bindings that define a default model for a specified binding site).

Regarding claim 43, which is dependent on claim 40, Ferrel discloses that the binding specification contains composition sequences that aid the formatter in formatting documents, the composition sequences defining the order in which formatting is to proceed using bindings between content elements and layout elements, each of the composition sequences including composition blocks containing ordered lists of direct bindings (col 8, lines 30-38: the design and content information in each project is considered as composition sequences since said information is the sequences of text data; col 10, lines 31-67: the publisher can place the content, such as a set of content objects in one or more containers of a title and then *create sections or subsections having pages with special controls, such as a set of title layout objects* that dynamically

find and display the content at run-time). The *sections and subsections* with special controls suggest *component blocks of ordered list* of controls, which are direct bindings since sections and subsections are ordered blocks of data.

Regarding claim 44, which is dependent on claim 43, Ferrel discloses that each of the direct bindings comprises a placement binding or a style binding (col 8, lines 39-64: the content has been formatted within the pre-defined control region of the page, the control knows how to format a particular piece of content by looking at the style that has been defined by the designer and then compares that style to a linked style sheet).

Claims 45-49 are for a medium of method claims 41-44, and are rejected under the same rationale.

Regarding independent claim 50, Ferrel discloses a method of formatting a document based on bindings, content elements, and layout elements, the bindings defining relationships between the content elements and the layout elements, the method comprising processing bindings that comprise placement bindings before processing that comprise style bindings (figure 8 and col 21, lines 43-59: the picture and the story are displayed in the positions determined by the control shows the placement bindings, and each of the control references a style sheet to provide information instructions on how the content is to be displayed shows the style binding).



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Regarding independent claim 51, Ferrel discloses a method of formatting a document using stored content elements and stored layout elements, the stored content elements including content aspects and layout aspect, the method comprising determining whether the layout should be dominated by the layout components or the layout aspects of the content components (col 8, lines 15-29: "the content and the design are stored as separate objects in the public distribution site so that *many different pieces of content can be viewed with the same appearance*"; col 10, lines 37-63: a layout can be used for binding with a content where the content can be updated; col 8, lines 49-64: "one important facet of this invention is the concept of viewing the same content objects in many different ways ...different controls on the same page can each displays the same linked content in varying formats"; col 8, line 65 to col 9, line 7: *a content* can be displayed by *different styles* chosen by the designer to change the style; the fact that some of the bindings are **layout-centric** and some of the bindings are **content-centric** indicates determining the layout domination or the content domination in formatting a document using stored content elements and stored layout elements).

Regarding claim 52, which is dependent on claim 51, Ferrel discloses that the content elements include layout aspects and the bindings contain information sufficient to mediate a conflict between a layout aspect of a content element and a layout element with which the content element is associated (col 8, lines 15-64: the fact that the control knows how to format a particular piece of content by *looking at the style defined* and then *comparing* that style to a linked style sheet suggests a mediation of conflict

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between the layout aspect of the content and a layout element with which the content element is associated).

Claims 53 and 54 are for a medium of method claims 12 and 45, and are rejected under the same rationale.

### ***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Crosby et al. (US Pat No. 6,507,848 B1, 1/14/03, filed 3/30/99).

Benson (US Pat No. 6,046,818, 4/4/00, filed 6/3/97).

Mastie (US Pat No. 6,480,866 B2, 11/12/02, filed 6/30/98).

Nehab et al. (US Pat No. 6,029,182, 2/22/00, filed 10/4/96).

Hsu et al. (US Pat No. 6,377,956 B1, 4/23/02, filed 2/22/99).

McCotter et al. (US Pat No. 6,401,097 B1, 6/4/02, filed 1/22/99, priority 1/22/98).

Ferrel et al. (US Pat No. 5,878,421, 3/2/99, filed 7/17/95).

Young (US Pat No. 6,177,933 B1, 1/23/01, filed 11/26/97).

Lo et al. (US Pat No. 6,212,534 B1, 4/3/01, filed 5/13/99).

Kueny (US Pat No. 6,547,831 B1, 4/15/03, filed 5/26/99).

Allouche et al. (US Pat No. 5,459,827, 10/17/95).

Saito et al. (US Pat No. 5,323,312, 6/21/94).

Shimizu et al. (US Pat No. 6,374,271 B1, 4/16/02, filed 9/26/97).

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Ferrel et al. (US Pat No. 6,230,173 B1, 5/8/01, filed 7/17/95).

Kiyono et al. (US Pat No. 6,137,483, 10/24/00, filed 11/27/96).

Orr et al. (US Pat No. 5,895,476, 4/20/99, filed 9/9/96).

Haralick, Document Image Understanding: geometric and logical layout, IEEE 1994, pages 385-390.


Bennett et al., Transformations on a Dialog Tree: Rule-Based Mapping of Content to Style, ACM 1989, pages 67-75.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cong-Lac Huynh whose telephone number is 703-305-0432. The examiner can normally be reached on Mon-Fri (8:30-6:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather Herndon can be reached on 703-308-5186. The fax phone numbers for the organization where this application or proceeding is assigned are 703-746-7239 for regular communications and 707-746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-9000.

clh  
May 28, 2003

  
STEPHENS S. HOPP  
PRIMARY EXAMINER